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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/020,607  | 12/10/2001  | Paul E. Peterzell    | 010073U2            | 8096             |
| 23696   | 7590        | 06/08/2004           | EXAMINER            |                  |
| Qualcomm Incorporated<br>Patents Department<br>5775 Morehouse Drive<br>San Diego, CA 92121-1714 |             |                      | MIS, DAVID C        |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2817                |                  |

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/020,607             | PETERZELL ET AL.    |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | David Mis              | 2817                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 01/09/04.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 9-13 and 48-52 is/are allowed.
- 6) Claim(s) 1,4-6,8,14,19-21,31,32,41 and 42 is/are rejected.
- 7) Claim(s) 2, 3, 7, 15-18, 22-30, 33-40 and 43-47 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the control signal of claim 5 must be shown; mixing the VCO frequency with a second signal having the further divided down frequency of claim 9 must be shown - or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The disclosure is objected to because of the following informalities: On page 1, first paragraph -- this application is a continuation of prior Application No. 09/797,745, now abandoned -- should replace the reference to benefit now there.

Appropriate correction is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6, 8, 14, 19-21, 31, 32, 41 and 42 are rejected under 35 U.S.C. 102(b.) as being clearly anticipated by Schenk.

A method for generating a frequency (title), while Applicant's "a local oscillator" frequency "in a multi-band direct conversion wireless communications device" is intended use in the preamble and thus not given weight (MPEP 2111.02); receiving a signal from a VCO having a VCO frequency (column 3, lines 22-26); dividing the VCO frequency by the number N to produce a signal having a divided down frequency (column 3, lines 66-68), the harmonic utilizing circuitry of Schenk is not essential to the fundamental utilizing circuitry of Schenk and does not interfere with the teaching thereof; mixing the signal having the VCO frequency with the signal having the divided down frequency to produce an output signal having an output frequency (column 6, lines 51-56); shifting the phase of the output signal (done by the band pass filters); ... divided by N when a control signal is received ... ("a control signal" is at least the one for controlling the oscillator, which once received results in the VCO frequency being divided by N); ... includes a receiver / transmitter ... (column 2, lines 65-68); ... VCO operates below / above a frequency of RF signals ... (1200 MHz has rf frequencies both below it and above it); ... VCO operates at frequencies between 1600 and 1788 MHz ... (the VCO operates at the frequency it is controlled to operate at, and a VCO designed to accommodate 1200 MHz

would operate at up to 1788 MHz; also the frequency that the Schenk VCO's operated at were not limited to those which were operational at 1200 MHz); ... selectively coupled to the VCO... (at some point during design of any circuit someone selects what any element is coupled to).

4. Claims 9-13 and 48-52 are allowed.
5. Claims 2, 3, 7, 15-18, 22-30, 33-40 and 43-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a

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first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Mis whose telephone number is (571)272-1765. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Mis  
Primary Examiner  
Art Unit 2817